

Application No. 09/808,652

IN THE CLAIMS:

Please cancel claims 1-3 and amend claims 4-6 and 8-12 as follows:

1-3. Canceled.

4. (Currently Amended) A method ~~as claimed in claim 1~~, of scheduling for servicing a plurality of output queues associated with a communications port, the method comprising cyclical steps of:  
selecting for servicing an output queue holding at least one Payload Data Unit (PDU) from the plurality of output queues, the selected output queue having an associated credit counter holding a lowest credit value;  
selectively incrementing the credit value held in the credit counter to account for the transmission of the at least one PDU having a length from the selected output queue; and  
periodically decrementing the credit values of a subgroup of the corresponding plurality of credit counters associated with output queues holding at least one PDU pending transmission in accordance with transmission bandwidth apportionments assigned to each output queue;  
wherein selectively incrementing the credit value held in the credit counter associated with the selected output queue, ~~the method further comprises a step of~~ setting the credit value of the credit counter to the length of the packet if the credit value of the credit counter has a positive value, whereby selecting for servicing the output queue having the lowest credit value emulated weighted fair queuing is achieved in the long run with minimal computation.

5. (Currently Amended) A method as claimed in claim ~~1~~ 4, wherein selectively incrementing the credit value of the credit counter associated with the selected output queue, ~~the method further comprises a step of~~ setting the credit value of the credit counter to a sum between

Application No. 09/808,652

the current credit value of the credit counter and the length of the packet if the credit value of the credit counter has a negative value.

6. (Currently Amended) A method as claimed in claim ~~4~~ 5, wherein the transmission of PDUs is divided into transmission periods and periodically decrementing the credit values of the subgroup of the plurality of credit counters is performed once during each transmission period.

7. (Previously Presented) A method as claimed in claim 6, wherein decrementing the credit values of the subgroup of the plurality of credit counters is performed at the end of each transmission period.

8. (Currently Amended) A method as claimed in claim 7, wherein decrementing the credit values of the subgroup of credit counters ~~the method comprises a step of setting the value of each such credit counter to the current credit counter value minus the value of the corresponding apportionment.~~

9. (Currently Amended) A method as claimed in ~~claim 1, wherein the method~~ claim 5 further ~~comprises a step of~~ comprising sorting the output queues holding at least one PDU pending transmission according to the credit values held in the corresponding credit counters.

10. (Currently Amended) A method as claimed in ~~claim 1, wherein the method~~ claim 5 further ~~comprises a step of~~ comprising scanning through the credit counters of the plurality of output queues having at least one PDU pending transmission for the lowest credit value held in the corresponding credit counters.

Application No. 09/808,652

11. (Currently Amended) A scheduler implementing the method of queue service scheduling claimed in claim 1.

12. (Currently Amended) A data switching node implementing the method of queue service scheduling as claimed in claim 1.